

Title (en)  
Operating apparatus of discharge lamp

Title (de)  
Gerät zum Betreiben einer Entladungslampe

Title (fr)  
Appareil pour alimenter une lampe à décharge

Publication  
**EP 0944294 A2 19990922 (EN)**

Application  
**EP 99105451 A 19990317**

Priority  
JP 6805898 A 19980318

Abstract (en)  
An operating apparatus of a discharge lamp for operating the discharge lamp having an arc tube defining a discharge space includes: generation means for generating a first waveform signal having a frequency component of an acoustic resonance frequency exciting a mode which straightens an arc discharge, a center line of a waveform of the first waveform signal being maintained at a fixed level; and modulation means for modulating the first waveform signal periodically so that a polarity of the center line of the first waveform signal changes alternately at a modulation frequency which is lower than the acoustic resonance frequency, and generating a modulated signal. A modulation depth  $\alpha / \beta$ , where  $\alpha$  is a peak-to-peak amplitude of the first waveform signal and  $\beta$  is an effective value of an amplitude of the modulated signal, is set at such a value that a sealed material in the arc tube is prevented from adhering to a center portion of the arc tube in substantially a strip shape. <IMAGE>

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IPC 8 full level  
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